NEMSIS TAC Whitepaper

NEMSIS V3 Pertinent Negatives (PN) and NOT Values (NV) Usage

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Abstract
This document describes the usage of the following NEMSIS V3 attributes:

1. NOT values (NV), and
2. Pertinent Negatives (PN),
3. xsi:nil="true" (Nil).

Background
The current definitions for NV, PN, and Nil are described below:

NOT Values Accepted (NV)
• Not all data elements accept NOT values.
• NOT Values have been condensed in Version 3.
  o Not Applicable = The data element is not applicable or pertinent to the EMS event, assessment or, intervention. This value should be available to the data-entry user.
  o Not Recorded = The data element is considered applicable to the EMS event, but was left blank by the data-entry user. The EMS software should auto-populate blank fields with "Not Recorded" when exporting the record. This value should not be available to the data-entry user.
  o Not Reporting = The data element is not collected by the EMS agency or state. This NOT value does not apply to National elements where "Usage = Required". The EMS software should auto-populate the data fields not collected with "Not Reporting" when exporting the record. This value should not be available to the data-entry user.

Pertinent Negative Values (PN)
• Not all data elements accept Pertinent Negative Values.
• Pertinent Negative Values are documented as "an attribute" of an element. It allows the documentation of pertinent negative value in addition to the documentation of a "real" value.
• Example of use:
  o Example - Aspirin Administration:
    • If the medication Aspirin is part of the agency protocol for Chest Pain but was not administered by the responding crew, the reason why should be documented. This is done through the use of Pertinent Negative Values. If the patient took the Aspirin prior to the EMS arrival on scene, the value "Medication Already Taken" should be documented in addition to "Aspirin".

Is Nillable (Nil)
• Indicates that the element can accept a "blank" value.
If the element is left "blank" the software must submit an appropriate value of one of the two previous attributes: Pertinent Negative or NOT Values.

**Possible Valid XML Variations**

<table>
<thead>
<tr>
<th>Option</th>
<th>Code</th>
<th>PN</th>
<th>NV</th>
<th>Nil</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td><code>&lt;eMedications.03&gt;142153&lt;/eMedications.03&gt;</code></td>
</tr>
<tr>
<td>2 *</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td><code>&lt;eMedications.03 PN=&quot;8801009&quot;&gt;142153&lt;/eMedications.03&gt;</code></td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td><code>&lt;eMedications.03 NV=&quot;7701003&quot;&gt;142153&lt;/eMedications.03&gt;</code></td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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</tr>
<tr>
<td>5</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td><code>&lt;eMedications.03 xsi:nil=&quot;true&quot;&gt;&lt;/eMedications.03&gt;</code></td>
</tr>
<tr>
<td>6 *</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>7</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>8</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
</tbody>
</table>

*Elements allow for only 1, 2, & 6 or 1, 2, & 7. Read the Notes section to determine what options are allowed.

**Example**

**Element:** eMedications.03

**Medication**
RXCU Code: 142153
Name: Albuterol Sulfate

**Pertinent Negative**
8801009 - Medication Already Taken

**NOT Value**
7701003 - Not Recorded

**Options Allowed**
Only options 1, 2, 7 are allowed.

**Note**

All of the examples listed above will pass XML Schema validation; however, only options 1, 2, 6, and 7 are valid. Elements that allow Pertinent Negatives (PN) will either allow for option 2 or 6.

To determine whether option 2 or 6 is allowed reference the text file **NEMSIS v3 Element Details** located at: https://nemsis.org/technical-resources/version-3/version-3-data-dictionaries/. If the element allows for PN’s and the column “PNNill” has PNNill then option 6 is allowed and option 2 is not. Likewise, if the element allows for PN’s and the column “PNNill” is empty then option 2 is allowed and option 6 is not.

In addition, schematron is required for additional validation which the NEMSIS TAC will be implementing for the NEMSIS Version 3 elements. Elements with their valid options are located here in the CSV files located at: https://nemsis.org/technical-resources/version-3/version-3-data-dictionaries/.